PB85-214146

# Superfund Record of Decision (EPA Region 9) Taputimu Farm/Insular Territories Site American Samoa, Decemember 1983

(U.S.) Environmental Protection Agency
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EPA

# Superfund Record of Decision:

# Taputimu Farm/Insular Terratories Site, AS

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## TECHNICAL REPORT DATA
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15. SUPPLEMENTARY NOTES

16. ABSTRACT

The Taputimu Farm is a facility owned by the government of American Samoa and is the territory's primary repository of unused and out-dated agricultural chemicals and pesticides. The facility is constructed of plywood walls with a corrugated metal roof and is located approximately a quarter mile from a public beach.

The remedial action alternative selected for this site involves repacking or overpacking the chemical/pesticide materials stored at the Taputimu Farm, decontaminating the storage facilities and sealing the decontaminated surfaces, and transporting all the waste materials to the U.S. mainland for disposal. The cost of this remedial action is estimated to be $160,000.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
|---|---|---|
| Record of Decision<br>Taputimu Farm/Insular Territories Site, AS<br>Contaminated media: liquids, solids, air<br>Key contaminants: pesticides (2,4,5-T, heptachlor, dieldrin, aldrin, DDT), organic solvents, PCBs, agricultural chemicals | | |

| 18. DISTRIBUTION STATEMENT | 19. SECURITY CLASS *(This Report)* | 21. NO. OF PAGES |
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Record of Decision
Remedial Action Selection

Site: Taputimu Farm, American Samoa

Documents Reviewed:

I have reviewed the following documents describing the analysis of cost-effective remedial actions developed for the Taputimu Farm site:

- "Remedial Investigation, Insular Territory Hazardous Waste Sites, Taputimu Farm Pesticide Storage Facility, American Samoa, Draft Report"; Black & Veatch Consulting Engineers; June 30, 1983.

- Staff summaries and recommendations.

- Recommendation by the Governor of American Samoa.

Description of Selected Option:

The remedial action involves repacking or overpacking the chemical/pesticide materials stored at Taputimu Farm, decontaminating the storage facilities and sealing the decontaminated surfaces, and transporting all the waste materials to the U.S. mainland for disposal. The cost of this option is estimated to be $160,000.

Declarations:

Consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the National Contingency Plan, I have determined that the packaging, transport and disposal off-site of hazardous substances is cost-effective and that it effectively mitigates and minimizes damage to, and provides adequate protection of public health, welfare and the environment. I have also determined that the action being taken is appropriate when balanced against the need to use Trust Fund money at other sites. In addition, I have determined that the off-site transport of hazardous substances is more cost-effective than other remedial actions and, therefore, is consistent with section 101(24) of CERCLA.

Lee M. Thomas
Assistant Administrator
Office of Solid Waste and
Emergency Response

TAPUTIMU FARM
American Samoa
Remedial Action Briefing Document

Purpose of the Remedial Action:

The recommended remedial action is the offsite transport and disposal of agricultural chemicals and pesticides which are improperly stored on American Samoa.

Background:

- Taputimu Farm, a facility owned by the government of American Samoa, is the primary repository of unused and out of date agricultural chemicals and pesticides on American Samoa.

- The pesticides are stored in a warehouse of plywood wall construction with corrugated metal roof located 1/4 mile from a public beach.

- A threat to public health and the environment is presented by the site. Because of the climate of American Samoa, there is a concern that the warehouse will flood, transporting chemicals and pesticides to the public beach and contaminating the beach and marine life. In addition, the warehouse is used for purposes other than pesticide storage and workers are thus exposed to the chemicals through inhalation and direct contact.

- On September 19, 1981, the American Samoa Environmental Quality Commission named the Taputimu Farm as the highest priority site on American Samoa. It was placed on the interim list of 115 priority waste sites in October 1981 and is included on the final National Priorities List published on September 8, 1983.

Remedial Planning Activities to Date:

- A remedial investigation and feasibility study was conducted at the site by EPA's Interim Zone Contractor, Black and Veatch, from November 1982 through July 1983.

- Investigations found pesticides labeled as heptachlor, methoxyclor, dieldrin and 2,4,5-T stored in open, deteriorating containers and spilled across the floor of the warehouse.

- Samples taken from unlabeled material contained in the warehouse revealed significant concentrations of priority pollutants such as pentachlorophenol, toluene, ethylbenzene, aldrin, dieldrin and DDT.

- About 4,000 lbs. of liquid and solid pesticide material is stored in the warehouse.

- Based on the results of the sampling, alternatives were developed for remedial action. These alternatives are described in the attached document, entitled "Alternative Selection".

Regional and Territorial Recommendation:

- Region 9 and the American Samoan Environmental Quality Commission recommend shipment of all the wastes to the U.S. mainland for disposal. The cost of this option is estimated to be $160,000.

Policy Affecting This Site:

- Omnibus Territories Act

  Section 501 of P.L. 95-134, and section 601 of P.L. 96-205, the Omnibus Territories Act, enable the Federal government to waive normal cost-sharing requirements for the Insular Territories. The Federal government must waive cost-sharing under $100,000 for the Northern Mariana Islands and American Samoa. The Federal government may waive cost-sharing over $100,000 for the Northern Mariana Islands and American Samoa. Because, American Samoa's share of the costs of the remedial action will be less than $100,000, the cost share requirements under CERCLA must be waived.

Enforcement:

- During the week of September 19, 1983, a Notice Letter was delivered to the Governor of American Samoa as the responsible party. The Government of American Samoa owns and operates Taputimu Farm.

- The Governor acknowledged the American Samoan Government's liability and requested that EPA proceed with the planned actions. The American Samoan government has declined to undertake or pay for the action voluntarily.

Related Planned Removal:

- An unlisted site on American Samoa, the Tafuna Power Plant, contains several PCB contaminated transformers. Removal of these transformers from that site will be combined with this project as a planned removal. Because the costs of

mobilization in the South Pacific is by far the most expensive component of the project, combining the planned removal with the remedial action represents substantial cost savings to the government. The work is expected add no more than $20,000 to the cost of the project.

EPA Lead for Implementation:

- Because the costs for this project are relatively small, the U.S. Army Corps of Engineers suggested that EPA maintain the lead for the project. $CH_2M$ Hill, the REM-FIT contractor will subcontract the work for EPA.

- The schedule for work calls for full implementation of the selected remedial action by the end of January, 1984.

# Alternative Selection
# Taputimu Farm, American Samoa

## Background

On July 1, 1983, the Region 9 office of EPA transmitted the "Remedial Investigation, Insular Territory Hazardous Waste Sites, Taputimu Farm Pesticide Storage Facility, American Samoa, Draft Report" prepared by Black & Veatch Consulting Engineers, to the Environmental Quality Commission, American Samoa (EQC) and the Corps of Engineers (COE) for review and comment. The COE determined that it would not be cost-effective for it to administer any of the remedial alternatives. On July 14, 1983, EPA made the decision to refer the project to the zone contractor, $CH_2M$ Hill, for implementation upon approval of funding.

EQC and EPA staff reviewed the alternatives and identified the recommended remedial action. The action involves the removal of all hazardous substances from the Taputimu Farm site for disposal on the U.S. mainland.

On July 15, 1983, EPA requested that EQC manage the public review of the RI/FS and the recommended remedial alternative action because of the great distance of American Samoa from the Region 9 office. A newspaper article and radio announcments were used to notify the public that the RI/FS and the recommended remedial alternative action were available for review from July 25 to August 12, 1983. No public comments were received by the EQC.

## Feasibility Study and Alternatives

The object of the feasibility study was to develop source control remedial actions which would eliminate the potential for contamination from agricultural chemicals/pesticides stored at the Taputimu Farm.

The chemical/pesticide materials at Taputimu Farm are improperly stored, improperly containerized, and lack identifying information in numerous instances. They present a health hazard to individuals working in the area via inhalation of the vapors and by direct contact. Because of the heavy annual precipitation and the proximity of the site to a public beach, the potential also exists for human health problems and environmental damage due to washout of materials from the warehouse.

After the remedial investigation was completed, six alternative remedies for the site were evaluated. The alternatives were:

1. No Action
2. Store on American Samoa
3. Dump in Ocean
4. Treat and Dispose of on American Samoa
5. Ship to U.S. Mainland and Dispose
6. Recover Usable Material and Ship Remainder to U.S. Mainland for Disposal

The six alternatives were evaluated for:

- Technical Feasibility
- Cost Effectiveness
- Environmental Effectiveness
- Protection of Public Health and Welfare

As a result of the evaluation, four of the options were excluded from consideration:

1. No Action - This alternative does not alleviate the threat to public health posed by the site. The proximity of the public beach and the high annual precipitation presents the potential for the materials to wash out of the building and cause additional human health and environmental problems. In addition, the chemicals/pesticides as presently stored present a health hazard to individuals working in the area via inhalation and direct contact.

2. Store on American Samoa - Under this alternative, a storage facility would be designed and built for the hazardous materials somewhere on American Samoa. The cost for this alternative are as high as that of other alternatives which remove the material from the island completely. In addition, the island climate and geology make construction of a reliable storage facility difficult. Because this alternative was not significantly cheaper than other alternatives and it represented less reliable protection for the island environment, it was not considered further.

3. Dump in Ocean - This alternative would require obtaining a permit to dump materials into the ocean under the Ocean Dumping Regulation (40 CFR Parts 220-28) which would delay response action. Moreover, because of the nature of the materials, this permit would be difficult if not impossible to obtain.

4. Treat and Dispose of material on American Samoa. No disposal facility currently exists onsite or elsewhere on American Samoa. The costs to design and build such a facility greatly exceed (3x) the cost to ship and dispose of the material at an existing facility.

In addition to an assessment of the technical alternatives for disposing of the hazardous materials, the appropriate level of decontamination of the storage facilities at Taputimu Farm was evaluated. Four levels were considered:

Level 1 - Sweeping, power vacuuming, washing/rinsing, and sealing the contaminated surfaces. Collected material, wash and rinse water, and certain equipment to be packed and included in the hazardous waste shipment.

Level 2 - Level 1 plus removal and replacement of existing walls.

Level 3 - Level 2 plus pouring new concrete slab over existing slab.

Level 4 - Level 2 plus removal and reconstruction of floor slab.

Because the intended future use of the warehouse was limited to storage of farm equipment, Level 1 was determined to provide adequate decontamination.

Two technical alternatives were considered cost effective as remedies for Taputimu Farm:

5. Ship to U.S. mainland and dispose
6. Recover usable material and ship remainder to U.S. mainland for disposal

Region 9 and the American Samoa Environmental Quality Commission recommend shipment of all of the waste to the U.S. mainland for appropriate disposal. The sixth alternative is not recommended because it would greatly increase the institutional complexity of the remedy and does not represent significant cost saving ($5000-$10,000). The permits required to repackage and distribute the pesticides would also delay the remedy.

The estimated cost for the recommend remedy is $160,000.

Community Involvement

The RI/FS Reports and the selected remedial alternative action were subject to a 3-week public review from July 25, 1983 to August 12, 1983.

No comments were received on the reports or selected remedial alternative action.

Recommended Action

Section 300.68(j) of the National Contingency Plan (NCP) [47 CFR 31180, July 16, 1982] states that the appropriate extent of remedy shall be determined by the lead agency's selection of the remedial alternative which the agency determines is cost-effective (i.e., the lowest cost alternative that is technologically feasible and reliable and which effectively mitigates and minimizes damage to and provides adequate protection of public health, welfare, or the environment). Based on our evaluation of the cost-effectiveness of each of the proposed alternatives, results of the 3-week public review period, information from the Site Investigation and Feasibility Study Reports, and information from the Environmental Quality Commission of American Samoa, we recommend the selected alternative above. This alternative includes: 1) repacking or overpacking the chemical/pesticide materials stored at Taputimu Farm and transporting it to the U. S. mainland for disposal and 2) decontaminating the storage facilities and sealing the decontaminated surfaces. We have determined that implementation of this alternative will effectively mitigate damage to and provide adequate protection of public health, welfare, and the environment.

The capital cost of this alternative is estimated to be $160,000. There are no operation and maintenance costs associated with this alternative.

Territory Input

After giving careful consideration to the cost-effectiveness of each alternative and not receiving any public comments on the investigation and feasibility reports or the selected alternative, the Governor of American Samoa, with the support of the Environmental Quality Commission, requested that EPA implement the selected alternative. The letter from the Governor is attached.

Proposed Action

We request your approval for the removal of chemical/pesticide materials from Taputimu Farm to the U.S. mainland for disposal. In addition, we request an allocation of $160,000 for the project.

Tentative Schedule

| | |
|---|---|
| Initiate Design | November, 1983 |
| Complete Design | December, 1983 |
| Initiate Clean-up | January, 1984 |
| Complete Clean-up | January, 1984 |